Amendments to the Claims:

Please cancel claims 4-12, 14-16, 20, 22-25, 27, 29-32, 39-43 and 48-50 without prejudice or disclaimer, such that the pending claims are in accordance with the following listing of claims, which will replace all prior versions, and listings, of claims in the application:

1.   (Previously Presented):   A method for routing a data packet comprising a header section and a pay- load section, said header section comprising a compressed header section containing coded information including routing information, comprising the steps of:

- receiving said data packet at an input interface

- routing said data packet to an output interface

- forwarding said data packet to said output interface , wherein said routing step comprises ascertaining said routing information from said compressed header section, and wherein said coded information is left unchanged in said routing and forwarding steps.

2.   (Original):   A method according to claim 1, wherein said ascertaining step comprises a step of reading a first header compression context identifier from said compressed header section.

3.   (Previously Presented):   A method according to claim 1, wherein said routing step comprises a step of assigning a second header compression context identifier to said data packet and a step of replacing said first header compression context identifier by said second header compression context identifier in said data packet.

4.   (Cancelled)

5.   (Cancelled)

6.   (Cancelled)

7.   (Cancelled)

8.   (Cancelled)

9.   (Cancelled)

10.   (Cancelled)

11.   (Cancelled)

12.   (Cancelled)

13.   (Previously Presented)   A method according to claim 1, comprising, before said routing step, a step of decompressing said routing information from said compressed header section.

14.   (Cancelled)

15.   (Cancelled)

16.   (Cancelled)

17.   (Previously Presented)   A method according to claim 13, comprising, after said decompressing step, a step of including at least a part of said decompressed header section into said data packet.

18. (Previously Presented)   A method according to claim 17, wherein said part of said decompressed header is attached to said data packet in front of said header section, such that said part of said decompressed header can be forwarded before said header section.

19. (Previously Presented)   A method according to claim 17, comprising, a step of removing at least a part of said decompressed header from said data packet.

20. (Cancelled)

21. (Previously Presented)   A method according to claim 2, comprising a step of classifying said data packet according to a service class.

22. (Cancelled)

23. (Cancelled)

24. (Cancelled)

25. (Cancelled)

26. (Previously Presented)   A method accord to claim 21, wherein said forwarding step comprises a step of placing said data packet into one of a plurality of queues, the chosen queue corresponding to a value of said classification code point.

27. (Cancelled)

28. (Previously Presented)   A method according to claim 1, wherein said forwarding step comprises radio or microwave transmission of said data packet.

29. (Cancelled)

30. (Cancelled)

31. (Cancelled)

32. (Cancelled)

33. (Previously Presented)   A decompressor device, comprising an input interface adapted to receive at least one data packet containing compressed data, a de-compressing means communicating with said input interface and adapted to decompress said compressed data such that decompressed data are created based on said compressed data, and an output interface communicating with said decompressing means and adapted to provide said decompressed data of said data packet, wherein said decompressing means is adapted to selectively decompress only compressed header data contained in a header section of said data packet.

34. (Previously Presented)   A decompressor device according to claim 33, wherein said decompressing means has access to a header compression context table and is adapted to decompress said compressed data using data contained in at least one predetermined section of said header compression context table, and/or using at least one predetermined mathematical decompression rule.

35. (Previously Presented)   A decompressor device according to claim 33, wherein said decompressing means is adapted to decompress from said compressed header section an identifier of an external network node that is the destination of said data packet.

36.   (Previously Presented)   A decompressor device according to claim 35, wherein said decompressing means is adapted to decompress only said identifier of said network node that is the destination of said data packet.

37.   (Previously Presented)   A decompressor device according to claim 33, wherein said decompressing means is adapted to decompress said complete compressed header section of said data packet.

38.   (Previously Presented)   A decompressor device according to claim 33, wherein said decompressing means is adapted to decompress a service classification code element from said compressed header section.

39.   (Cancelled)

40.   (Cancelled)

41.   (Cancelled)

42.   (Cancelled)

43.   (Cancelled)

44.   (Previously Presented)   A router device for routing at least one data packet with a compressed header section, comprising at least one input port adapted to receive said data packet through at least one first communication link, and a plurality of output ports, wherein said input port comprises a reading unit adapted to read a first header compression context identifier from said compressed header section, and a switching unit adapted to replace said first header compression context identifier by a second header compression identifier.

45.   (Previously Presented)   A router device according to claim 44, wherein said switching unit communicates with a switching table assigning to said first header compression context identifier said second header compression context identifier and at least one output port identifier.

46.   (Previously Presented)   A router device according to claim 45, further comprising a control unit communicating with said reading unit and said switching table, and adapted to detect a new first header compression context identifier received at said reading unit, to assign a new second header compression context identifier and an output port identifier to said first header compression context identifier, and to create at least one entry in said switching table (116) for said identifiers, one entry for each assignment of an output port.

47.   (Previously Presented)   A router device according to claim 46, wherein said control unit is additionally adapted to erase said entry in said switching table given a predetermined condition.

48. (Cancelled)

49. (Cancelled)

50. (Cancelled)